

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:  
a scanning means for scanning a photosensitive  
body using a plurality of semiconductor lasers to form  
5 a latent image; and  
a latent image forming means for pulse-width-  
modulating a drive signal of the semiconductor lasers  
in accordance with a write position of the latent  
image, when exposure is performed such that one of  
10 beams from the plurality of semiconductor lasers is  
partially overlapped with a beam adjacent to one of the  
beams from the plurality of semiconductor lasers on the  
photosensitive body.
- 15 2. An image forming apparatus according to claim  
1, wherein the latent image forming means does not  
pulse-width-modulate the drive signal, when at least  
two of the plurality of semiconductor lasers are  
simultaneously turned on in one scanning, and  
20 the latent image forming means pulse-width-  
modulates the drive signal, when one of the beams from  
the plurality of semiconductor lasers which are turned  
on in one scanning is adjacent to one of the beams from  
the plurality of semiconductor lasers which are turned  
25 on in the next scanning.

3. An image forming apparatus according to claim

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1, wherein the latent image forming means does not pulse-width-modulate the drive signal, when at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning, and

5           the latent image forming means pulse-width-modulates the drive signal, when one of the plurality of semiconductor lasers is turned on in one scanning.

4. An image forming method for scanning the  
10   photosensitive body using a plurality of semiconductor lasers to form a latent image, comprising the step of:  
          forming a latent image by modulating a drive signal of the semiconductor lasers by PWM in accordance with a write position of the latent image, when  
15   exposure is performed such that one of the beams from the plurality of semiconductor lasers is partially overlapped with an adjacent beam of one of the beams from the plurality of semiconductor lasers on the photosensitive body.

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5. An image forming method according to claim 4, wherein, in the latent image forming step, the drive signal is not modulated by PWM when at least two of the plurality of semiconductor lasers are simultaneously  
25   turned on in one scanning but modulated by PWM when one of the beams from the plurality of semiconductor lasers which are turned on in one scanning is adjacent to one

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of the beams from the plurality of semiconductor lasers which are turned on in the next scanning.

6. An image forming method according to claim 4,  
5 wherein, in the latent image forming step, the drive signal is not modulated by PWM when at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning but modulated by PWM when one of the plurality of semiconductor lasers is turned on  
10 in one scanning.

7. An image forming apparatus comprising:  
a plurality of emitting means for emitting a plurality of light beams;  
15 scanning means for scanning the plurality of light beams emitted from the plurality of emitting means on a common photosensitive body;  
modulating means for modulating the plurality of light beams in accordance with respective image data;  
20 detecting means for detecting a plurality of image pixels which are adjacent to each other in a sub scanning direction and exposed in different main scannings, in accordance with the image data; and  
exposure intensity control means for relatively  
25 decreasing an exposure intensity of the light beams for at least one of the plurality of image pixels detected by the detecting means, in response to a detection

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image data of at least one main scanning.

13. An image forming apparatus according to claim 7, wherein exposure is performed such that adjacent pixels are partially overlapped with each other.

14. An image forming apparatus according to claim 7, wherein the light beam is a laser beam.

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10 15. An image forming apparatus comprising:  
a plurality of emitting means for emitting a plurality of light beams;  
scanning means for scanning the plurality of light beams emitted from the plurality of emitting means on a  
15 common photosensitive body;  
modulating means for modulating the plurality of light beams in accordance with respective image data;  
detecting means for detecting a plurality of image pixels which are adjacent to each other in a sub  
20 scanning direction and exposed in the common main scanning, in accordance with the image data; and  
exposure intensity control means for relatively increasing an exposure intensity of the light beams for at least one of the plurality of image pixels detected  
25 by the detecting means, in response to a detection result of the detecting means.

16. An image forming apparatus according to claim 15, wherein the exposure intensity control means controls an exposure time of the light beams for recording one pixel.

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17. An image forming apparatus according to claim 16, wherein the exposure intensity control means causes the modulating means to pulse-width-modulate.

10 18. An image forming apparatus according to claim 17, wherein the exposure intensity control means controls the modulating means such that a pulse width to a pixel detected by the detecting means is shorter than that to a pixel which is not detected by the  
15 detecting means.

19. An image forming apparatus according to claim 18, wherein the exposure intensity control means controls the modulating means such that the pulse width  
20 to the pixel which is detected by the detecting means is 100 % and the pulse width to the pixel which is not detected by the detecting means is shorter than 100 %.

20. An image forming apparatus according to claim 25 15, wherein the detecting means has means for storing image data of at least one main scanning.

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21. An image forming apparatus according to claim 15, wherein exposure is performed such that adjacent pixels are partially overlapped with each other.

5           22. An image forming apparatus according to claim 15, wherein the light beam is a laser beam.

23. An image forming method comprising:  
an emitting step of emitting a plurality of light  
10   beams;  
a scanning step of scanning the plurality of light  
beams to be emitted on a common photosensitive body;  
a modulating step of modulating the plurality of  
light beams in accordance with respective image data;  
15   a detecting step of detecting a plurality of image  
pixels which are adjacent to each other in a sub  
scanning direction and exposed in different main  
scannings, in accordance with the image data; and  
an exposure intensity control step of relatively  
20   decreasing an exposure intensity of the light beams for  
at least one of the plurality of image pixels detected  
by the detecting step, in response to a detection  
result of the detecting step.

25           24. An image forming method comprising:  
an emitting step of emitting a plurality of light  
beams;

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a scanning step of scanning the plurality of light beams to be emitted on a common photosensitive body;

a modulating step of modulating the plurality of light beams in accordance with respective image data;

5 a detecting step of detecting a plurality of image pixels which are adjacent to each other in a sub scanning direction and exposed in the common main scanning, in accordance with the image data; and

10 an exposure intensity control step of relatively increasing an exposure intensity of the light beams for at least one of the plurality of image pixels detected by the detecting step, in response to a detection result of the detecting step.

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